FIG. **6** is a cross-section of a flat panel display according to another embodiment of the present invention.

FIG. **7** is a cross-section of a flat panel display according to another embodiment of the present invention.

FIG. **8** is a cross-section of a flat panel display according to another embodiment of the present invention.

DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENTS

FIG. **1** is an exploded perspective view of a flat panel display according to an embodiment of the present invention. FIG. **2** is a cross-section taken along line I-I of FIG. **1**. While the flat panel display of FIG. **1** and FIG. **2** is shown as an organic electroluminescent display, it may be one of various types of flat panel displays, such as, liquid crystal displays, inorganic light emitting displays, electron emission displays, etc.

Referring to FIG. **1** and FIG. **2**, the flat panel display includes an enclosure **4** and a light-emitting device **10** arranged inside the enclosure **4**. At least one supporter **5** may be placed on an edge of the light emitting device **10**. The light emitting device **10** includes a substrate **1**, an image display portion **2** formed on the substrate **1** and including an organic light-emitting device, and a sealing element **3** coupled to the substrate **1** to protect the image display portion **2** from the external atmosphere.

The image display portion **2**, which includes the organic light emitting device, displays an image.

Various types of organic light emitting devices may be used as the organic light emitting device included in the image display portion **2**. In other words, a simple passive-matrix (PM) organic light emitting device or an active-matrix (AM) organic light emitting device, which has a thin film transistor (TFT) layer, may be used as the organic light emitting device included in the image display portion **2**.

FIG. **3** shows an example of a PM organic light emitting device. Referring to FIG. **3**, a first electrode layer **21** is formed on a substrate **1** in strips, and an organic layer **23** and a second electrode layer **24** are sequentially formed on the first electrode layer **21**. An insulative layer **22** may be interposed between adjacent first electrode strips **21**, and the second electrode layer **24** may be formed in strips that cross the first electrode strips **21** at right angles. The organic layer **23** may be a monomer organic layer or a polymer organic layer. When using a monomer organic layer, a hole injection layer (HIL), a hole transport layer (HTL), an emissive layer (EML), an electron transport layer (ETL), an electron injection layer (EIL), etc. may be stacked in a single or complex structure. The organic material may be various materials including copper phthalocyanine (CuPc), N,N-Di(naphthalene-1-yl)-N,N'-diphenyl-benzidine; NPB, and tris-8-hydroxyquinoline aluminum (Alq3). The monomer organic layer may be formed by vacuum deposition.

A polymer organic layer usually includes an HTL and an EML. The HTL may be PEDOT, and the EML may be formed of a polymer organic material, such as poly-phenylenevinylene (PPV) or polyfluorene, by screen printing, inkjet printing, etc. The first electrode layer **21** serves as an anode electrode, and the second electrode layer **24** serves as a cathode electrode. Alternatively, the first electrode layer **21** may serve as the cathode, and the second electrode layer **24** may serve as the anode.

In front-emission light emitting displays, the second electrode layer **24** may be a transparent indium-tin-oxide (ITO) electrode. In rear-emission light emitting displays, the first electrode layer **21** may be a transparent electrode. The second electrode layer **24** may be produced by forming a thin semi-permeable metal film, such as, Mg, Ag, etc., and depositing transparent ITO on the thin semi-permeable film.

FIG. **4** shows an example of an AM organic light emitting device. Referring to FIG. **4**, each pixel of the image display portion **2** shown in FIG. **1** and FIG. **2** has a TFT and a self-luminant electroluminescent (EL) device.

The TFT included in each pixel need not have the exemplary structure shown in FIG. **4**. Additionally, the number of TFTs included in each pixel and the structure of each TFT may be changed into various forms. The AM organic light emitting device is described in greater detail below.

As shown in FIG. **4**, a TFT is formed on the substrate **1**. The TFT includes an active layer **12** formed on the substrate **1**, a gate insulating film **13** formed on the active layer **12**, and a gate electrode **14** formed on the gate insulating film **13**.

An inter-insulator **15** is formed on the gate electrode **14** and the gate insulating film **13**. A source electrode **16** and a drain electrode **17** are formed on the inter-insulator **15** and are coupled with a source area and a drain area, respectively, of the active layer **12** via contact holes.

A passivation film **18** of an insulative material is formed on the source and drain electrodes **16** and **17**, and an insulative pixel defining film **19** is formed on the passivation film **18**. The passivation film **18** may have a single-layered structure or a multi-layered structure.

Although not shown in FIG. **4**, at least one capacitor is coupled to the TFT.

A first electrode layer **21**, which serves as an anode electrode of an organic light emitting device, is coupled to the drain electrode **17**. As shown in FIG. **4**, the first electrode layer **21** is formed on the passivation film **18**, the pixel defining film **19** is formed on the first electrode layer **21**, and an opening is formed in the pixel defining film **19** exposing a portion of the first electrode layer **21**. Thereafter, an organic light emitting device, namely, the EL device, is formed. The organic light emitting device may emit red, green or blue light according to an organic material and a flow of current to display image information. The organic light emitting device includes the first electrode layer **21** coupled to the drain electrode **17** of the TFT and receiving positive power from the drain electrode **17**, a second electrode layer **24** covering the entire area of each pixel and supplying negative power to the pixel, and an organic layer **23** interposed between the first and second electrode layers **21** and **24** and emitting light.

The first electrode layer **21** may be a reflective electrode including a reflective layer of Ag, Mg, Al, Pt, Pd, Au, Ni, Nd, Ir, Cr, or a compound thereof, and ITO, IZO, ZnO, or In_2O_3 on the reflective layer.

The second electrode layer **24** may be a transparent electrode formed by depositing a metal with a small work function, such as Li, Ca, LiF/Ca, LiF/Al, Al, Mg, or a compound thereof, in a direction facing the organic layer **23** and forming an auxiliary electrode layer or a bus electrode line of a material suitable for forming a transparent electrode, such as ITO, IZO, ZNO, or In_2O_3, on the metal.

The second electrode layer **24** need not be deposited on the entire surface of each pixel. Rather, it may be formed to have various patterns. As described above, the first and second electrode layers **21** and **24** may be formed in strips that are orthogonal to each other.

The TFT structure and the organic light emitting device structure are not limited to the above-described embodiment as they may be modified into various structures.

The substrate **1** on which the image display portion **2** is formed may be transparent or opaque. Glass or plastic may be used for the transparent substrate **1**, and glass, plastic, or